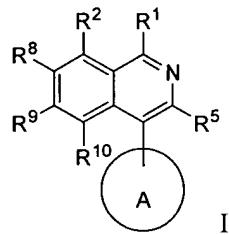


**Amendments to the Claims**

1. (currently amended) A compound of formula I



or a pharmaceutically acceptable salt, ~~crystal form, or hydrate,~~ wherein:

A is

a) an aryl ring selected from phenyl, wherein any stable phenyl aryl ring atom is independently unsubstituted or substituted with

- 1) halogen,
- 2) NO<sub>2</sub>,
- 3) CN,
- 4) CR<sup>46</sup>=C(R<sup>47</sup>R<sup>48</sup>)<sub>2</sub>,
- 5) C≡C R<sup>46</sup>,
- 6) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>OR<sup>46</sup>,
- 7) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>R<sup>47</sup>),
- 8) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>C(O)R<sup>46</sup>,
- 9) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>C(O)OR<sup>46</sup>,
- 10) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>R<sup>46</sup>,
- 11) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>S(O)0-2R<sup>61</sup>,
- 12) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>S(O)0-2N(R<sup>46</sup>R<sup>47</sup>),
- 13) OS(O)0-2R<sup>61</sup>,
- 14) N(R<sup>46</sup>)C(O)R<sup>47</sup>,
- 15) N(R<sup>46</sup>)S(O)0-2R<sup>61</sup>,
- 16) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)R<sup>61</sup>,
- 17) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)R<sup>61</sup>OR<sup>47</sup>,
- 18) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)(CR<sup>k</sup>R<sup>l</sup>)<sub>s</sub>C(O)N(R<sup>47</sup>R<sup>48</sup>),
- 19) N(R<sup>46</sup>)(CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>R<sup>61</sup>,
- 20) N(R<sup>46</sup>)(CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>47</sup>R<sup>48</sup>),
- 21) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>C(O)N(R<sup>47</sup>R<sup>48</sup>),

22) oxo,  
b) a heteroaryl ring selected from the group consisting of pyridine, pyrimidine, pyrazine, pyridazine, indole, pyrrolopyridine, benzimidazole, benzoxazole, benzothiazole, and benzo[diazole] selected from the group consisting of  
~~a 5-membered unsaturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting of N, O or S,~~  
~~a 6-membered unsaturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting of N, O and S, and~~  
~~a 9- or 10-membered unsaturated bicyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting of N, O or S,~~

wherein any stable S heteroaryl ring atom is unsubstituted or mono- or di-substituted with oxo, and any stable C or N heteroaryl ring atom is independently unsubstituted or substituted with

- 1) halogen,
- 2) NO<sub>2</sub>,
- 3) CN,
- 4) CR<sup>46</sup>=C(R<sup>47</sup>R<sup>48</sup>)<sub>2</sub>,
- 5) C≡C R<sup>46</sup>,
- 6) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>OR<sup>46</sup>,
- 7) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>R<sup>47</sup>),
- 8) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>C(O)R<sup>46</sup>,
- 9) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>C(O)OR<sup>46</sup>,
- 10) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>R<sup>46</sup>,
- 11) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>S(O)0-2R<sup>61</sup>,
- 12) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>S(O)0-2N(R<sup>46</sup>R<sup>47</sup>),
- 13) OS(O)0-2R<sup>61</sup>,
- 14) N(R<sup>46</sup>)C(O)R<sup>47</sup>,
- 15) N(R<sup>46</sup>)S(O)<sub>x</sub>R<sup>61</sup>,
- 16) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)R<sup>61</sup>,
- 17) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)R<sup>61</sup>OR<sup>47</sup>,
- 18) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)(CR<sup>k</sup>R<sup>l</sup>)<sub>s</sub>C(O)N(R<sup>47</sup>R<sup>48</sup>),
- 19) N(R<sup>46</sup>)(CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>R<sup>61</sup>,
- 20) N(R<sup>46</sup>)(CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>47</sup>R<sup>48</sup>),
- 21) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>C(O)N(R<sup>47</sup>R<sup>48</sup>), or

22) oxo, or

c) a 4-, 5- or 6-membered heterocyclic ring containing 1 or 2 nitrogen atoms, unsubstituted, mono-substituted or di-substituted with C<sub>1</sub>-C<sub>6</sub> alkyl;

Y is CH<sub>2</sub>, NR<sup>53</sup>, NC(O)R<sup>53</sup>, S(O)O-2 or O;

G is H<sub>2</sub> or O;

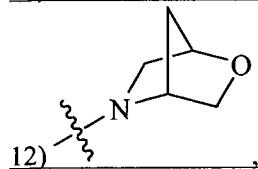
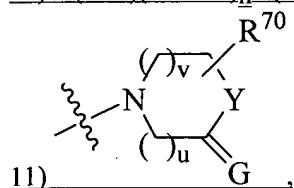
R<sup>a</sup>, R<sup>b</sup>, R<sup>c</sup>, R<sup>d</sup>, R<sup>e</sup>, R<sup>f</sup>, R<sup>g</sup>, R<sup>h</sup>, R<sup>i</sup>, R<sup>j</sup>, R<sup>k</sup>, and R<sup>l</sup> are independently selected from the group consisting of:

- 1) hydrogen,
- 2) C<sub>1</sub>-C<sub>6</sub> alkyl,
- 3) halogen,
- 4) aryl,
- 5) R<sup>80</sup>,
- 6) C<sub>3</sub>-C<sub>10</sub> cycloalkyl, and
- 7) OR<sup>4</sup>,

said alkyl, aryl, and cycloalkyl being unsubstituted, monosubstituted with R<sup>7</sup>, disubstituted with R<sup>7</sup> and R<sup>15</sup>, trisubstituted with R<sup>7</sup>, R<sup>15</sup> and R<sup>16</sup>, or tetrasubstituted with R<sup>7</sup>, R<sup>15</sup>, R<sup>16</sup> and R<sup>17</sup>;

R<sup>1</sup> is independently selected from:

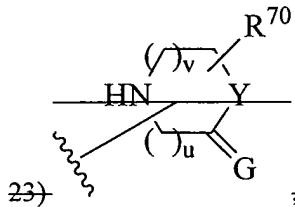
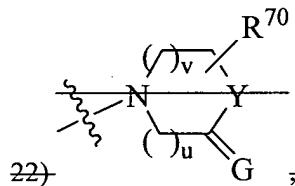
- 1) hydrogen,
- 2) halogen,
- 3) CN,
- 4) OR<sup>40</sup>,
- 5) N(R<sup>40</sup>R<sup>41</sup>),
- 6) C(O)OR<sup>40</sup>,
- 7) R<sup>81</sup>,
- 8) S(O)O-2R<sup>6</sup>,
- 9) N(R<sup>40</sup>)(CR<sup>a</sup>R<sup>b</sup>)<sub>n</sub>R<sup>6</sup>, wherein R<sup>6</sup> = R<sup>83</sup>,
- 10) N(R<sup>40</sup>)(CR<sup>a</sup>R<sup>b</sup>)<sub>n</sub>N(R<sup>41</sup>R<sup>42</sup>),

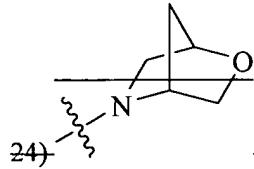


13)  $C(O)N(R^{41}R^{42})$ , and

14) a 4-, 5-, or 6-membered heterocyclic ring containing 1 nitrogen atom,  
unsubstituted, or mono-, di- or tri-substituted with -OH.

- 1) hydrogen;
- 2) halogen;
- 3)  $NO_2$ ;
- 4)  $CN$ ;
- 5)  $CR^{40}=C(R^{41}R^{42})$ ;
- 6)  $C=CR^{40}$ ;
- 7)  $(CR^aR^b)_nOR^{40}$ ;
- 8)  $(CR^aR^b)_nN(R^{40}R^{41})$ ;
- 9)  $(CR^aR^b)_nC(O)R^{40}$ ;
- 10)  $(CR^aR^b)_nC(O)OR^{40}$ ;
- 11)  $(CR^aR^b)_nR^{40}$ ;
- 12)  $(CR^aR^b)_nS(O)O_2R^6$ ;
- 13)  $(CR^aR^b)_nS(O)O_2N(R^{40}R^{41})$ ;
- 14)  $OS(O)O_2R^6$ ;
- 15)  $N(R^{40})C(O)R^{41}$ ;
- 16)  $N(R^{40})S(O)O_2R^6$ ;
- 17)  $(CR^aR^b)_nN(R^{40})R^6$ ;
- 18)  $(CR^aR^b)_nN(R^{40})R^6OR^{41}$ ;
- 19)  $(CR^aR^b)_nN(R^{40})(CR^cR^d)_tC(O)N(R^{41}R^{42})$ ;
- 20)  $N(R^{40})(CR^aR^b)_nR^6$ ;
- 21)  $N(R^{40})(CR^aR^b)_nN(R^{41}R^{42})$ ;





24)  $(CR^aR^b)_nC(O)N(R^{41}R^{42})$ , and

25) a 4-, 5-, or 6-membered heterocyclic ring containing 1 nitrogen atom, unsubstituted, or mono-, di- or tri-substituted with  $-OH$ ;

$R^2$ ,  $R^8$ ,  $R^9$  and  $R^{10}$  are independently selected from hydrogen and halogen;

$R^9$  is  $OCH_3$  or  $OCHF_2$ .

1) hydrogen;

2) halogen;

3)  $NO_2$ ;

4)  $CN$ ;

5)  $CR^{43}=C(R^{44}R^{45})$ ;

6)  $C=CR^{43}$ ;

7)  $(CRERF)_pOR^{43}$ ;

8)  $(CRERF)_pN(R^{43}R^{44})$ ;

9)  $(CRERF)_pC(O)R^{43}$ ;

10)  $(CRERF)_pC(O)OR^{43}$ ;

11)  $(CRERF)_pR^{43}$ ;

12)  $(CRERF)_pS(O)O_2R^{60}$ ;

13)  $(CRERF)_pS(O)O_2N(R^{43}R^{44})$ ;

14)  $OS(O)O_2R^{60}$ ;

15)  $N(R^{43})C(O)R^{44}$ ;

16)  $N(R^{43})S(O)O_2R^{60}$ ;

17)  $(CRERF)_pN(R^{43})R^{60}$ ;

18)  $(CRERF)_pN(R^{43})R^{60}OR^{44}$ ;

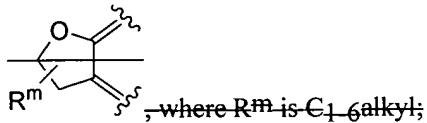
19)  $(CRERF)_pN(R^{43})(CRERF)_qC(O)N(R^{44}R^{45})$ ;

20)  $N(R^{43})(CRERF)_pR^{60}$ ;

21)  $N(R^{43})(CRERF)_pN(R^{44}R^{45})$ , and

22)  $(CRERF)_pC(O)N(R^{43}R^{44})$ ,

or  $R^2$  and  $R^8$  are independently as defined above, and  $R^9$  and  $R^{10}$ , together with the atoms to which they are attached, form the ring



$R^4$ ,  $R^{40}$ ,  $R^{41}$ ,  $R^{42}$ ,  $R^{43}$ ,  $R^{44}$ ,  $R^{45}$ ,  $R^{46}$ ,  $R^{47}$ ,  $R^{48}$ ,  $R^{49}$ ,  $R^{50}$ ,  $R^{51}$ ,  $R^{52}$ , and  $R^{53}$  are independently selected from:

- 1) hydrogen,
- 2) C<sub>1</sub>-C<sub>6</sub> alkyl,
- 3) C<sub>3</sub>-C<sub>10</sub> cycloalkyl,
- 4) aryl,
- 5)  $R^{81}$ ,
- 6) CF<sub>3</sub>,
- 7) C<sub>2</sub>-C<sub>6</sub> alkenyl, and
- 8) C<sub>2</sub>-C<sub>6</sub> alkynyl,

said alkyl, aryl, and cycloalkyl is unsubstituted, mono-substituted with  $R^{18}$ , di-substituted with  $R^{18}$  and  $R^{19}$ , tri-substituted with  $R^{18}$ ,  $R^{19}$  and  $R^{20}$ , or tetra-substituted with  $R^{18}$ ,  $R^{19}$ ,  $R^{20}$  and  $R^{21}$ ;  $R^5$  is independently selected from:

- 1) hydrogen,
- 2) halogen,
- 3) CN,
- 4) C(O)N( $R^{49}R^{50}$ ),
- 5) C(O)OR<sup>49</sup>,
- 6) S(O)O-2N( $R^{49}R^{50}$ ),
- 7) S(O)O-2R<sup>62</sup>,
- 8) C<sub>1</sub>-C<sub>6</sub> alkyl,
- 9) C<sub>3</sub>-C<sub>10</sub> cycloalkyl,
- 10)  $R^{82}$ ,

said alkyl, aryl, and cycloalkyl is unsubstituted, mono-substituted with  $R^{22}$ , di-substituted with  $R^{22}$  and  $R^{23}$ , tri-substituted with  $R^{22}$ ,  $R^{23}$  and  $R^{24}$ , or tetra-substituted with  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$  and  $R^{25}$ ;  $R^6$ ,  $R^{60}$ ,  $R^{61}$ ,  $R^{62}$  and  $R^{63}$  are independently selected from:

- 1) C<sub>1</sub>-C<sub>6</sub> alkyl,
- 2) aryl,
- 3)  $R^{83}$ , and
- 4) C<sub>3</sub>-C<sub>10</sub> cycloalkyl;

said alkyl, aryl, and cycloalkyl is unsubstituted, mono-substituted with  $R^{26}$ , di-substituted with  $R^{26}$  and  $R^{27}$ , tri-substituted with  $R^{26}$ ,  $R^{27}$  and  $R^{28}$ , or tetra-substituted with  $R^{26}$ ,  $R^{27}$ ,  $R^{28}$  and  $R^{29}$ ;

R<sup>7</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup>, R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup>, R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup>, R<sup>26</sup>, R<sup>27</sup>, R<sup>28</sup>, R<sup>29</sup>, and R<sup>70</sup> are independently selected from:

- 1) C<sub>1</sub>-C<sub>6</sub> alkyl,
- 2) halogen,
- 3) OR<sup>51</sup>,
- 4) CF<sub>3</sub>,
- 5) aryl,
- 6) C<sub>3</sub>-C<sub>10</sub> cycloalkyl,
- 7) R<sup>84</sup>,
- 8) S(O)<sub>0-2</sub>N(R<sup>51</sup>R<sup>52</sup>),
- 9) C(O)OR<sup>51</sup>,
- 10) C(O)R<sup>51</sup>,
- 11) CN,
- 12) C(O)N(R<sup>51</sup>R<sup>52</sup>),
- 13) N(R<sup>51</sup>)C(O)R<sup>52</sup>,
- 14) S(O)<sub>0-2</sub>R<sup>63</sup>,
- 15) NO<sub>2</sub>, and
- 16) N(R<sup>51</sup>R<sup>52</sup>);

R<sup>80</sup>, R<sup>81</sup>, R<sup>82</sup>, R<sup>83</sup> and R<sup>84</sup> are independently selected from a group of unsubstituted or substituted heterocyclic rings consisting of a 4-6 membered unsaturated or saturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting N, O and S, and a 9- or 10-membered unsaturated or saturated bicyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting of N, O or S;

n, p, q, r, s and t are independently 0, 1, 2, 3, 4, 5 or 6;

u is 0, 1 or 2; and

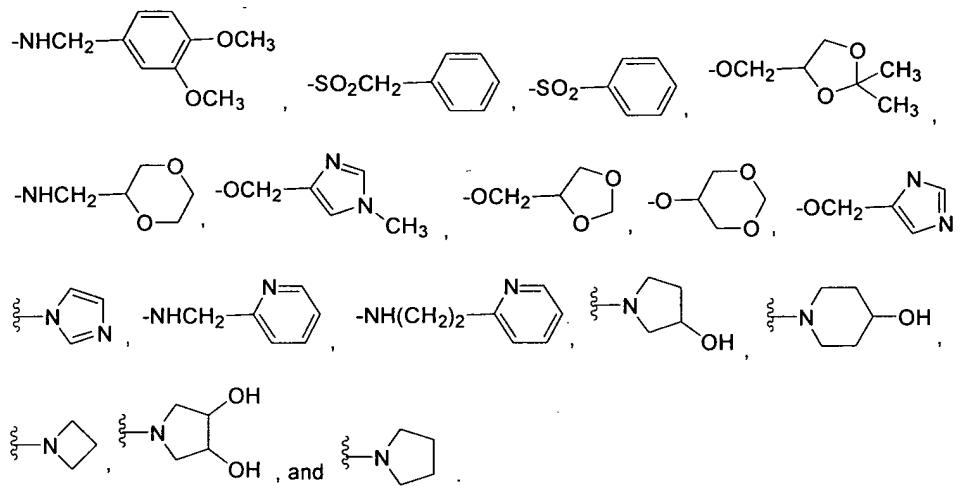
v is 0, 1 or 2.

2.(canceled).

3. (canceled).

4. (original) A compound of Claim 1-3, or a pharmaceutically acceptable salt thereof, wherein R<sup>1</sup> is selected from the group consisting of hydrogen, -SCH<sub>3</sub>, -SO<sub>2</sub>CH<sub>3</sub>, -NH(CH<sub>2</sub>)<sub>3</sub>OH, -NH(CH<sub>2</sub>)<sub>2</sub>OH, -NH(CH<sub>2</sub>)<sub>2</sub>OCH<sub>3</sub>,

-NH(CH<sub>2</sub>)<sub>3</sub>OCH<sub>3</sub>, -NH(CH<sub>2</sub>)<sub>2</sub>NH<sub>2</sub>, -NH<sub>2</sub>, -SO<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, -CN, Cl, -OCH<sub>3</sub>,  
 -OCH<sub>2</sub>CHCH<sub>2</sub>, -OCH<sub>2</sub>CH(OH)CH<sub>2</sub>OH, -NHCH<sub>2</sub>CHCH<sub>2</sub>, -CH<sub>3</sub>, -CH<sub>2</sub>CH<sub>2</sub>OH,  
 -O(CH<sub>2</sub>)<sub>2</sub>CHCH<sub>2</sub>, -O(CH<sub>2</sub>)<sub>2</sub>CH(OH)(CH<sub>2</sub>OH), -NHCH(CH<sub>2</sub>OH)<sub>2</sub>,  
 -NHCH<sub>2</sub>CH(OH)CH<sub>2</sub>OH, -NH(CH<sub>2</sub>)<sub>2</sub>CH(OH)CH<sub>2</sub>OH,



5. (original) A compound of Claim 4, or a pharmaceutically acceptable salt thereof, wherein A is selected from the group consisting of

- 1) phenyl, wherein any stable ring atom is unsubstituted or substituted with halogen,
- 2) pyridinyl, wherein any stable C ring atom is unsubstituted or substituted with halogen,
- 3) indolyl, wherein any stable C or N ring atom is unsubstituted or substituted with halogen, and
- 4) a heterocyclic ring selected from the group consisting of pyrrolidine, piperidine, piperazine, and azetidine, unsubstituted, mono-substituted or di-substituted with C<sub>1</sub>-C<sub>6</sub> alkyl.

6. (original) A compound of Claim 5, or a pharmaceutically acceptable salt thereof, wherein R<sup>5</sup> is selected from the group consisting of CN and C<sub>1</sub>-C<sub>6</sub> alkyl, wherein said alkyl is unsubstituted, mono-substituted with R<sup>22</sup>, di-substituted with R<sup>22</sup> and R<sup>23</sup>, tri-substituted with R<sup>22</sup>, R<sup>23</sup> and R<sup>24</sup>, or tetra-substituted with R<sup>22</sup>, R<sup>23</sup>, R<sup>24</sup> and R<sup>25</sup>.

7. (original) A compound of Claim 6, or a pharmaceutically acceptable salt thereof, selected from the group consisting of  
[(6-methoxy-4-phenylisoquinolin-3-yl)methyl]dimethylamine,  
1-(1-chloro-6-methoxy-4-phenylisoquinolin-3-yl)-N,N-dimethylmethanamine,

{[6-methoxy-1-(methylthio)-4-phenylisoquinolin-3-yl]methyl}dimethylamine,  
[6-methoxy-1-(methylsulfonyl)-4-phenylisoquinolin-3-yl]methyl(dimethyl)amine oxide,  
1-[6-methoxy-1-(methylsulfonyl)-4-phenylisoquinolin-3-yl]-N,N-dimethylmethanamine,  
3-[(dimethylamino)methyl]-6-methoxy-4-phenylisoquinoline-1-carbonitrile,  
2,3-Dimethyl-6-methoxy-4-phenylisoquinolinium hydroxide,  
6-methoxy-1-(2-methoxyethoxy)-3-methyl-4-phenylisoquinoline,  
{3-[(6-methoxy-3-methyl-4-phenylisoquinolin-1-yl)oxy]propyl}amine,  
2-[(6-methoxy-3-methyl-4-phenylisoquinolin-1-yl)amino]ethanol,  
6-methoxy-3-methyl-1-(methylsulfonyl)-4-phenylisoquinoline,  
6-methoxy-N-(2-methoxyethyl)-3-methyl-4-phenylisoquinolin-1-amine,  
N-(6-methoxy-3-methyl-4-phenylisoquinolin-1-yl)ethane-1,2-diamine,  
6-methoxy-3-methyl-4-phenylisoquinoline,  
N-(3,4-dimethoxybenzyl)-6-methoxy-3-methyl-4-phenylisoquinolin-1-amine,  
6-methoxy-3-methyl-4-phenylisoquinolin-1-amine,  
1-(ethylsulfonyl)-6-methoxy-3-methyl-4-phenylisoquinoline,  
1-(benzylsulfonyl)-6-methoxy-3-methyl-4-phenylisoquinoline,  
6-methoxy-3-methyl-4-phenyl-1-(phenylsulfonyl)isoquinoline,  
6-methoxy-3-methyl-4-phenylisoquinoline-1-carbonitrile,  
3-tert-butyl-6-methoxy-1-(2-methoxyethoxy)-4-phenylisoquinoline,  
1-chloro-6-methoxy-4-phenylisoquinoline-3-carbonitrile,  
6-methoxy-4-phenylisoquinoline-1,3-dicarbonitrile,  
1-(allyloxy)-6-methoxy-4-phenylisoquinoline-3-carbonitrile,  
1-(2,3-dihydroxypropoxy)-6-methoxy-4-phenylisoquinoline-3-carbonitrile,  
(allylamino)-6-methoxy-4-phenylisoquinoline-3-carbonitrile,  
(+/-)-1-[(2,3-dihydroxypropyl)amino]-6-methoxy-4-phenylisoquinoline-3-carbonitrile,  
1-{[(2S)-2,3-dihydroxypropyl]amino}-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-{[(2R)-2,3-dihydroxypropyl]amino}-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

(+/-)-1-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-{[(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy}-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-{[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy}-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-{[(2R)-2,3-dihydroxypropyl]oxy}-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-{[(2S)-2,3-dihydroxypropyl]oxy}-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

(+/-)-1-{[2,3-dihydroxypropyl]oxy}-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-[(3R)-3-hydroxypyrrolidin-1-yl]-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-[(3S)-3-hydroxypyrrolidin-1-yl]-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

(+/-)-1-[3-hydroxypyrrolidin-1-yl]-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-[cis-3,4-dihydroxypyrrolidin-1-yl]-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

6-methoxy-4-phenyl-1-pyrrolidin-1-ylisoquinoline-3-carbonitrile,

6-methoxy-1-(methylsulfonyl)-4-phenylisoquinoline-3-carbonitrile,

6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1,6-dimethoxy-4-phenylisoquinoline-3-carbonitrile,

1-chloro-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,

4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,

4-(3-fluorophenyl)-6-methoxy-1-methylisoquinoline-3-carbonitrile,

4-(3-fluorophenyl)-1-[(2-hydroxyethyl)amino]-6-methoxyisoquinoline-3-carbonitrile,

1-amino-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,

4-(3-fluorophenyl)-1-[(3-hydroxypropyl)amino]-6-methoxyisoquinoline-3-carbonitrile,

1-(but-3-enyloxy)-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,

(+/-)-1-(2,3-dihydroxypropoxy)-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,

1-[(2R)-2,3-dihydroxypropoxy]-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,  
1-[(2S)-2,3-dihydroxypropoxy]-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,  
(+/-)-1-(3,4-dihydroxybutoxy)-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,  
(+/-)-1-[(3R)-3,4-dihydroxybutoxy]-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,  
1-[(3S)-3,4-dihydroxybutoxy]-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,  
(+/-)-1-[(1,4-dioxan-2-ylmethyl)amino]-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-  
carbonitrile,  
1-[(1,4-dioxan-(2R)-2-ylmethyl)amino]-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-  
carbonitrile,  
1-[(1,4-dioxan-(2S)-2-ylmethyl)amino]-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-  
carbonitrile,  
4-(3-fluorophenyl)-6-methoxy-1-[(1-methyl-1H-imidazol-4-yl)methoxy]isoquinoline-3-  
carbonitrile,  
(+/-)-1-(1,3-dioxolan-4-ylmethoxy)-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-  
carbonitrile,  
1-(1,3-dioxolan-(4R)-4-ylmethoxy)-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,  
1-(1,3-dioxolan-(4S)-4-ylmethoxy)-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,  
1-(1,3-dioxan-5-yloxy)-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,  
4-(3-fluorophenyl)-1-{{[2-hydroxy-1-(hydroxymethyl)ethyl]amino}-6-methoxyisoquinoline-  
3-carbonitrile,  
4-(3-fluorophenyl)-1-(1H-imidazol-5-ylmethoxy)-6-methoxyisoquinoline-3-carbonitrile,  
1-{{[(2R)-2,3-dihydroxypropyl]amino}-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-  
carbonitrile,  
1-{{[(2S)-2,3-dihydroxypropyl]amino}-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-  
carbonitrile,  
(+/-)-1-{{[2,3-dihydroxypropyl]amino}-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-

carbonitrile,

1-(1H-imidazol-1-yl)-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

6-methoxy-4-phenyl-1-[(pyridin-2-ylmethyl)amino]isoquinoline-3-carbonitrile,

6-methoxy-4-phenyl-1-[(2-pyridin-2-ylethyl)amino]isoquinoline-3-carbonitrile,

(+/-)-1-[(3,4-dihydroxybutyl)amino]-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-

carbonitrile,

1-[(3R)-(3,4-dihydroxybutyl)amino]-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-

carbonitrile,

1-[(3S)-(3,4-dihydroxybutyl)amino]-4-(3-fluorophenyl)-6-methoxyisoquinoline-3-

carbonitrile,

1-chloro-4-(2-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,

4-(2-fluorophenyl)-6-methoxyisoquinoline-3-carbonitrile,

(+/-)-1-[(2,3-dihydroxypropyl)amino]-4-(2-fluorophenyl)-6-methoxyisoquinoline-3-

carbonitrile,

1-[(2S)-(2,3-dihydroxypropyl)amino]-4-(2-fluorophenyl)-6-methoxyisoquinoline-3-

carbonitrile,

1-[(2R)-(2,3-dihydroxypropyl)amino]-4-(2-fluorophenyl)-6-methoxyisoquinoline-3-

carbonitrile,

(+/-)-6-(difluoromethoxy)-1-{[2,3-dihydroxypropyl]amino}-4-(3-fluorophenyl)isoquinoline-

3-carbonitrile,

6-(difluoromethoxy)-1-{[(2S)-2,3-dihydroxypropyl]amino}-4-(3-fluorophenyl)isoquinoline-

3-carbonitrile,

6-(difluoromethoxy)-1-{[(2R)-2,3-dihydroxypropyl]amino}-4-(3-fluorophenyl)isoquinoline-

3-carbonitrile,

(+/-)-6-(difluoromethoxy)-1-{[2,3-dihydroxypropyl]oxy}-4-(3-fluorophenyl)isoquinoline-

3-carbonitrile,

6-(difluoromethoxy)-1-{[(2S)-2,3-dihydroxypropyl]oxy}-4-(3-fluorophenyl)isoquinoline-3-carbonitrile,

6-(difluoromethoxy)-1-{[(2R)-2,3-dihydroxypropyl]oxy}-4-(3-fluorophenyl)isoquinoline-3-carbonitrile,

1-(4-hydroxypiperidin-1-yl)-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-azetidin-1-yl-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

(+/-)-1-[trans-3,4-dihydroxypyrrolidin-1-yl]-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-[(3R,4R)-3,4-dihydroxypyrrolidin-1-yl]-6-methoxy-4-phenylisoquinoline-3-carbonitrile,

1-[(3S,4S)-3,4-dihydroxypyrrolidin-1-yl]-6-methoxy-4-phenylisoquinoline-3-carbonitrile, and

6-methoxy-N-(3-methoxypropyl)-3-methyl-4-phenylisoquinolin-1-amine.

8. (withdrawn) A method of treating a condition in a mammal, the treatment of which is effected or facilitated by Kv1.5 inhibition, which comprises administering a compound of Claim 1 in an amount that is effective at inhibiting Kv1.5.

9. (withdrawn) A method of Claim 8, wherein the condition is cardiac arrythmia.

10. (withdrawn) A method of Claim 9, wherein the cardiac arrythmia is atrial fibrillation.

11. (withdrawn) A method of Claim 9, wherein the cardiac arrythmia is selected from the group consisting of atrial flutter, atrial arrhythmia and supraventricular tachycardia.

12. (withdrawn) A method of preventing a condition in a mammal, the prevention of which is effected or facilitated by Kv1.5 inhibition, which comprises administering a compound of Claim 1 in an amount that is effective at inhibiting Kv1.5.

13. (withdrawn) A method of Claim 12, wherein the condition is cardiac arrythmia.

14. (withdrawn) A method of Claim 13, wherein the cardiac arrythmia is atrial fibrillation.

15. (withdrawn) A method of Claim 13, wherein the cardiac arrhythmia is selected from the group consisting of atrial flutter, atrial arrhythmia and supraventricular tachycardia.

16. (withdrawn) A method of Claim 12, wherein the condition is a thromboembolic event.

17. (withdrawn) A method of Claim 16, wherein the thromboembolic event is a stroke.

18. (withdrawn) A method of Claim 12, wherein the condition is congestive heart failure.

19. (currently amended) A pharmaceutical formulation comprising a pharmaceutically acceptable carrier and the compound Claim 1 or a pharmaceutically acceptable salt crystal form or hydrate thereof.

20. (original) A pharmaceutical composition made by combining the compound of Claim 1 and a pharmaceutically acceptable carrier.

21. (withdrawn) A method of treating cardiac arrhythmia comprising administering a compound of Claim 1 with a compound selected from one of the classes of compounds consisting of antiarrhythmic agents having Kv1.5 blocking activities, ACE inhibitors, angiotensin II antagonists, cardiac glycosides, L-type calcium channel blockers, T-type calcium channel blockers, selective and nonselective beta blockers, endothelin antagonists, thrombin inhibitors, aspirin, nonselective NSAIDs, warfarin, factor Xa inhibitors, low molecular weight heparin, unfractionated heparin, clopidogrel, ticlopidine, IIb/IIIa receptor antagonists, 5HT receptor antagonists, integrin receptor antagonists, thromboxane receptor antagonists, TAFI inhibitors and P2T receptor antagonists.

22. (withdrawn) A method for inducing a condition of normal sinus rhythm in a patient having atrial fibrillation, which comprises treating the patient with a compound of Claim 1.

23. (withdrawn) A method for treating tachycardia in a patient which comprises treating the patient with an antitachycardia device in combination with a compound of Claim 1.